

WHAT IS CLAIMED IS:

1. An apparatus comprising:

(A) a photometric unit for receiving object light and converting the object light into luminance signals of a plurality of areas; and

(B) a control unit for calculating a histogram of a luminance distribution on the basis of the luminance signals of the plurality of areas converted by said photometric unit, said control unit controlling operation of an illumination device for illuminating an object based on a result of the calculating.

2. The apparatus according to claim 1, wherein said photometric unit includes an image sensing element for converting object light into a video signal for photographing operation.

3. The apparatus according to claim 1, wherein said control unit controls the operation of the illumination device on the basis of a pattern of the calculated histogram.

4. The apparatus according to claim 1, wherein said control unit controls the operation of the illumination device on the basis of the luminance signals which are used differently in accordance with a pattern of the calculated histogram.

5. The apparatus according to claim 1, wherein said control unit controls the operation of the illumination device on the basis of luminance signals selected from the

luminance signals in accordance with a pattern of the  
calculated histogram.

6. The apparatus according claim 1, wherein when a pattern  
of the calculated histogram indicates that luminance signals  
5 concentrate on a predetermined luminance level to not less  
than a predetermined degree, said control unit controls the  
operation of the illumination device on the basis of  
luminance signals obtained by excluding the luminance  
signals of the predetermined luminance levels from the  
10 luminance signals.

7. The apparatus according to claim 1, wherein said  
control unit controls an amount of light emitted from the  
illumination device based on a result of the calculating.

8. The apparatus according to claim 1, wherein said  
15 control unit calculates the histogram on the basis of a  
photometry result obtained by said photometric unit upon  
preliminary illumination on the object.

9. The apparatus according to claim 8, wherein said  
control unit controls the operation of the illumination  
20 device based on a result of the calculating when photography  
is performed.

10. The apparatus according to claim 1, wherein said  
apparatus includes an image sensing apparatus.

11. The apparatus according to claim 1, wherein said  
25 apparatus includes a camera.

12. An apparatus comprising:

(A) a photometric unit for receiving object light and converting the object light into luminance signals of a plurality of areas; and

(B) a control unit for calculating a histogram of a  
5 luminance distribution on the basis of the luminance signals of the plurality of areas converted by said photometric unit, said control unit controlling flash photographing operation based on a result of the calculating.

13. The apparatus according to claim 12, wherein said  
10 photometric unit includes an image sensing element for converting object light into a video signal for photographing operation.

14. The apparatus according to claim 12, wherein said control unit controls the flash photographing operation on  
15 the basis of a pattern of the calculated histogram.

15. The apparatus according to claim 12, wherein said control unit controls the flash photographing operation on the basis of the luminance signals which are used differently in accordance with a pattern of the calculated histogram.

20 16. The apparatus according to claim 12, wherein said control unit controls the flash photographing operation on the basis of luminance signals selected from the luminance signals in accordance with a pattern of the calculated histogram.

25 17. The apparatus according claim 12, wherein when a pattern of the calculated histogram indicates that luminance

FOIA b 7 - D

signals concentrate on a predetermined luminance level to not less than a predetermined degree, said control unit controls the flash photographing operation on the basis of luminance signals obtained by excluding the luminance signals of the predetermined luminance levels from the luminance signals.

18. The apparatus according to claim 12, wherein said control unit calculates the histogram on the basis of a photometry result obtained by said photometric unit upon preliminary illumination on the object.

19. The apparatus according to claim 12, wherein said apparatus includes an image sensing apparatus.

20. The apparatus according to claim 12, wherein said apparatus includes a camera.

21. An illumination device control method comprising:  
receiving object light, converting the object light into luminance signals of a plurality of areas, calculating a histogram of a luminance distribution on the basis of the converted luminance signals of the plurality of areas, and controlling operation of an illumination device for illuminating an object based on a result of the calculating.

22. A flash photographing method comprising:  
receiving object light, converting the object light into luminance signals of a plurality of areas, calculating a histogram of a luminance distribution on the basis of the converted luminance signals of the plurality of areas, and

controlling flash photographing operation based on a result of the calculating.

23. A computer program product for supplying a control program for an illumination device, comprising

5 receiving object light, converting the object light into luminance signals of a plurality of areas, calculating a histogram of a luminance distribution on the basis of the converted luminance signals of the plurality of areas, and controlling operation of an illumination device for  
10 illuminating an object based on a result of the calculating.

24. The product according to claim 23, wherein said computer program product includes a storage medium.

25. A computer program product for supplying a flash photographing control program, comprising

15 receiving object light, converting the object light into luminance signals of a plurality of areas, calculating a histogram of a luminance distribution on the basis of the converted luminance signals of the plurality of areas, and controlling flash photographing operation based on a result  
20 of the calculating.

26. The product according to claim 25, wherein said computer program product includes a storage medium.